

This listing of claims will replace all prior versions of claims in the application.

Claim 1. (currently amended) A continuous process to oxychlorinate olefins and aromatics, comprising the conversion of olefins and aromatics as component (a) with oxygen and hydrogen chloride as component (b) in the presence of a solid cuprous/cupric salt catalyst in a reactor, ~~wherein characterized in that~~ components (a) and (b) are fed separately from each other in spatial terms into reaction zones and regeneration zones of the reactor, where the reaction zone shows a higher concentration of the catalyst in its oxidized form at the solids entry point than at the solids exit point, and the regeneration zone shows a higher concentration of the catalyst in its reduced form at the solids entry point than at its solids exit point, and where component (a) is fed into the reaction zones and component (b) is fed into the regeneration zones.

Claim 2. (currently amended) A process according to claim 1, ~~wherein characterized in that~~ component (b) is additionally fed into the reaction zone.

Claim 3. (currently amended) A process according to ~~claim 1 wherein claims 1 or 2, characterized in that~~ component (a) is additionally fed into the regeneration zone.

Claim 4. (currently amended) A process according to ~~claim 1 wherein claims 1 through 3, characterized in that~~ cupric chloride is used as the catalyst.

Claim 5. (currently amended) A process according to claim 4, ~~wherein characterized in that~~ the catalyst at the solids entry point of the reaction zone is 0.1 to 0.5 mol CuCl₂/kg cat; 0 to 0.1 mol CuCl/kg cat and 0 to 0.1 mol CuO/kg cat.

Claim 6. (currently amended) A process according to claim 5, wherein characterized in that the catalyst is 0.35 mol CuCl₂/kg cat; 0.02 mol CuCl/kg cat and 0.02 mol CuO/kg cat.

Claim 7. (currently amended) A process according to claim 1 wherein claims 1 through 4, characterized in that the catalyst at the solids exit point of the reaction zone is 0.1 to 0.2 mol CuCl₂/kg cat; 0.2 to 0.3 mol CuCl/kg cat and 0 to 0.1 mol CuO/kg cat.

Claim 8. (currently amended) A process according to claim 7, wherein characterized in that the catalyst is 0.1 mol CuCl₂/kg cat; 0.3 mol CuCl/kg cat and 0 mol CuO/kg cat.

Claim 9. (currently amended) A process according to claim 1 wherein claims 1 through 4, characterized in that the catalyst at the solids entry point of the regeneration zone is 0.1 to 0.2 mol CuCl₂/kg cat; 0.2 to 0.3 mol CuCl/kg cat; 0 to 0.1 mol CuO/kg cat.

Claim 10. (currently amended) A process according to claim 9, wherein characterized in that the catalyst is 0.1 mol CuCl₂/kg cat; 0.3 mol CuCl/kg cat and 0 mol CuO/kg cat.

Claim 11. (currently amended) A process according to claim 1 wherein claims 1 through 4, characterized in that the catalyst at the solids exit point is 0.2 to 0.5 mol CuCl₂/kg cat; 0 to 0.1 mol CuCl/kg cat and 0 to 0.1 mol CuO/kg cat.

Claim 12. (currently amended) A process according to claim 11, wherein characterized in that the catalyst is 0.4 mol CuCl₂/kg cat; 0.05 mol CuCl/kg cat and 0.05 mol CuO/kg cat.

Claim 13. (currently amended) A process according to claim 1, wherein characterized in that the catalyst circulation rate is 1 to 60 metric tons/hr of catalyst per metric ton/hr of product.

Claim 14. (currently amended) A process according to claim 13, wherein characterized in that the catalyst circulation rate is 55 metric tons/hr of catalyst per metric ton/hr of product.

Claim 15. (currently amended) A process according to claim 1, wherein characterized in that the difference in gas velocities between the reaction zones and the regeneration zones is 0.01 m/s to 0.1 m/s.

Claim 16. (currently amended) A process according to claim 1, wherein characterized in that the ratio of gas velocities is 1:1.1 to 1:1.3.